

L 00928-66 EWT(1)/EWP(e)/EWT(m)/EPF(c)/EPA(w)-2/T/EWP(t)/EWP(k)/EWP(z)/EWP(b)/  
EWA(m)-2 IJP(c) JD  
ACCESSION NR: AP5020640

UR/0147/65/000/003/0083/0088  
629. 194. 365

AUTHOR: Kesayev, Kh. V.; Latyshev, L. A.

TITLE: Surface ionization in a porous wall

SOURCE: IVUZ. Aviatsionnaya tekhnika, no. 3, 1965, 83-88

TOPIC TAGS: ionization coefficient, surface ionization, porous surface

ABSTRACT: Surface ionization processes occurring within a single capillary of a heated porous diaphragm are analyzed mainly in view of the frequent use of such materials for the determination of ionization coefficients. The usual formulas for surface ionization have been modified to take into account the self-consistent field, and methods are proposed for the approximate solution of equations. It is shown that the calculations compare favorably with the available experimental data. A working formula is presented which makes it possible to determine the ratio of ions to the total number of particles passing through the capillary. Orig. art. has: 3 figures and 12 formulas.

[LB]

ASSOCIATION: none

Cord 1/4

26  
B

L 00928-66

ACCESSION NR: AP5020640

SUBMITTED: 27Feb64

ENCL: 00

SUB CODE: SS,EM

NO REF Sov: 003

OTHER: 004

ATD PRESS: 4077

Cord 2/2 23

L 17984-63 ENT(1)/FCC(w)/BDS/ERC-2/ES(v) AFFTC/AFMDC/ESD-3/APGC  
Pe-4/Po-4/Pq-4 GW

ACCESSION NR: AT3002083

S/2728/62/008/000/0125/0174

AUTHORS: Lyubarskiy, K. A.; Latyshev, I. N.

79

TITLE: Results of investigations of telescopic meteors in Turkmenia during  
the IGY and the IGO

76

SOURCE: AN Turkmen SSR. Fiziko-tehnicheskiy institut. Trudy, v.8, 1962, 125-174

TOPIC TAGS: meteor, telescopic meteor, meteor elevation, meteor frequency,  
meteor speed, meteor definition sharpness, meteor entry deceleration,  
telemeteor, IGY, IGC

ABSTRACT: The paper gives a report on systematic observations of telescopic  
meteors (telemeteors) performed by the Astrophysical Laboratory of the Fiziko-  
tehnicheskiy institut (Physico-Technical Institute), AS, TurkmenSSR, during the  
IGY and the IGC. The observations were performed in accordance with the IGY  
program, and, in addition, a supplementary parameter, namely, the elevation  
of the telemeteors, was obtained. 12x80 binoculars were employed. The limiting  
star magnitude of the telemeteors registered was 10-10.5 m. The Hoffmeister  
effect, that is, the apparent decrease in star magnitude of celestial bodies en-  
gaged in a motion at elevated angular speed is still small with a 12x magnification.

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The binoculars were directed exactly at the zenith and were held fixed. The sighting was performed at the prescribed moment according to precalculated ephemerides to ensure accuracy of sighting and accordance between the visual fields of the two observers. The base observations were performed on a 505-m-long base, base azimuth 219 degrees SWNE. This base length was chosen to maximize the atmospheric volume viewed by each observer and to hold the parallax value greater than the observational errors. The base azimuth was dictated by the morphology of the local terrain and by a desire for an alignment of the base in a direction perpendicular to the predominant direction of the telemeteors (for maximum parallax). Systematic errors were minimized by having the observers alternate between the two observation posts. Each meteor was plotted on a star map from which the positional angle of the meteor (SWNE), the length of the visible path segment, and the right ascension of the point of intersection of the meteor track or its extension with the small circle delta=38 degrees were obtained. It became necessary to deviate from the system of registration proposed in the "Instructions for the observation of meteors during the IGY," because most of the parameters recommended therein are meaningless in the case of a small, closely bounded, field. The journal contains the following entries: (1) Serial number of meteor; (2) time of passage to the nearest minute; (3) brightness to the nearest 0.5; (4) color code (1 - blue, 2 - white, 3 - yellow, 4 - orange, 5 - red, and additive

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binary combinations thereof); (5) sharpness of definition in a 5-grade code; (6) speed in 5 grades; (7) time of the visibility of the meteor to the nearest 1/20 sec; (8) presence of a trail; (9) 2-digit indication showing whether the beginning of the meteor appearance (first digit) and the end of its appearance (second digit) were observed inside the visual field of the binocular (plus) or not so observed (minus); (10) in meteors with trail, the magnitude of the drift or diffusion of the trail. The present series of observations, performed by the same observers, on the same instruments, in the same region of the atmosphere, and on the same base, constitutes a unique series of base observations as to homogeneity and number of observations. The elaboration of these data is described, and the results are summarized in two categories, a geophysical and an astronomical. Geophysical conclusions: I. Elevations of telemeteors. The mean elevation of telemeteors, according to antecedent literature sources, was judged to be 0.67-0.40 of that of ordinary meteors. In fact, the telemeteors appeared grouped in 4 groups with elevations of 125, 95, 49, and 16 km. The authors do not regard it possible to identify the lower telemeteors with the Whipple micrometeorites (WMM), as had been done by I. S. Astapovich and A. K. Terent'yeva, since the WMM's are non-luminous. They also disagree with the antecedent identification of the lower telemeteors with the particles picked up by sounding rockets because of the excessive difference in the masses of these two types of particles. To substantiate the

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conclusions regarding the true elevations of the telemeteors, 195 pairs were analyzed in a parallax catalog (4 pages). The parallax-distribution curve of the telemeteors is found to be practically coincident with the Gaussian error-distribution curves. The mean elevation of the telemeteors (more accurately, the midpoint of their trajectories) is 101 km. Thus the elevation of telemeteors was found to coincide exactly with that of ordinary meteors. II. The midnight effect. An investigation of the sharp, oscillatory, changes in the diurnal cycle of the characteristics of telemeteors at or about the moment of local midnight is attributed to a rise and subsidence of the air at that time. These vertical motions, in conjunction with the resulting Coriolis accelerations arising therein, may explain the alternating westward and eastward changes in the drift of meteor trails.

III. Lunar tides. The magnitude of both the lunar and the solar tidal oscillations are analyzed and are found to be extremely strong in the upper atmosphere.

IV. Relationship between meteor phenomena and solar activity. While a connection between the meteor parallaxes and the solar activity is found, the observational material is judged to be inadequate to support any specific conclusions on the effect.

V. Some problems of meteor ionization. Trail formation is found in meteors of all brightnesses, but only in meteors moving at high speeds. Trail-forming meteors are ill-defined (blurred outlines). A clear-cut relationship was found between the sharpness of contour definition and the speed and brightness of

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ACCESSION NR: AT3002083

meteors. Bright and fast meteors are the most blurred; dark and slow meteors are the most sharply defined. VI. Deceleration of telemeteors. Deductive conclusions from meteors entering the field of view versus those passing through or exiting from the field of view show the intense braking effect undergone by meteors entering the atmosphere. VII. Trail drift. The details of these extremely difficult observations are described. VIII. Annual variation of relative and absolute elevations. Maxima in June and December, that is, at the time of the solstices, are noted, but an interpretation is found to be difficult. Astronomical conclusions: I. Luminosity functions. Issuing from the observations of the star magnitude observed, an attempt is made to determine the mass distribution. The authors concur in earlier conclusions that the luminosity function of fast meteors is steep, that is, that it suggests the existence of two types of sporadic material in telescopic meteors also. II. Speed and direction of telescopic meteors. Two ill-defined maxima are found: 300-350 min/sec and 450-500 min/sec. The position relative to the apex varies with the speed. As we pass from the fastest to the slowest meteors, the maximum is gradually displaced from 225-255 degrees to 285-315 degrees from the direction antiapex-sun to the direction sun-apex. This seemingly gradual transition may, of course, be the apparent result of a compensation of two groups of meteors. III. The radiants of telescopic meteors. Inasmuch as the distribution of the hourly numbers of meteors coincides almost

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ACCESSION NR: AT3002083

precisely with the Poisson distribution, it is concluded that the telemeteors are predominantly of sporadic nature. IV. Hourly numbers of telescopic meteors. The hourly numbers of meteors were determined usually by the Opik method. The greatest hourly numbers occur during the summer. This seemingly trivial fact has an extremely nontrivial interpretation: Inasmuch as during the summer the ecliptic occupies its lowest position, the increase in the number of meteors during the summer can be explained, in accordance with several antecedent authors, only by a nonuniform distribution of meteoric matter along the orbit of the Earth. The Earth appears to pass through a region having an increased density of meteoric bodies in the vicinity of the solar longitude of 100 to 150°. It is noted that the number of meteors during the IGY (July 1957 through June 1958) exceeds that observed during the same months of the subsequent year. This would suggest the existence of a secular variation in the number of meteors. Orig. art. has 31 tables, 11 figures, and numerous equations and formulas.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 29Apr63

ENCL: 000

SUB CODE: AS

NO REF SOV: 012

OTHER: 002

Card 6/6

IATYSHEV, M.Z.

Conference of Gornyi Zhurnal readers' at the Khrustal'-ninskiy Combine. Gor.zhur. no.8:78 Ag '60.  
(MIRA 13:8)

1. Glavnnyy inzh. Khrustal'ninskogo kombinata.  
(Mining engineering)

LATYSHEV, N.

Eliminate shortcomings in planning the extension of credit to  
collective farms. Fin. SSSR 17 no.10:53-55 0 '56. (MLRA 9:11)  
(Agricultural credit)

LATYSHEV, N. I.

"The Role of Sandflies in the Preservation of Virus of 'Skin-Leishmaniose'  
During the Interval Between Epidemics," Dokl. AN SSSR, 30, No.1, 1941

Division of Medical Parasitology, Inst. of Exptl. Med.

LATYSHEV, N. I.

USSR/Medicine - Parasitology  
Medicine - Parasites

Jul/Aug 48

"Genesis and Evolution of Leishman-Donovan Body," A. P. Kryukova, N. I. Latyshev,  
Sector of Parasitology, and Med Zool, Inst of Bacteriol, Epidemiol, and Infectious  
Diseases, Acad Med Sci USSR, 18 pp

"Zhur Obshch Biol" Vol IX, No 4

Treats subject under: (1) geographic data; (2) historical data; (3) genetic data;  
(4) conclusion. Submitted 16 Aug 46.

PA 14/19 T93

LATYSHEV, N. I.

LATYSHEV, N. I. "Some parasitological findings in the animals of the Murgab River valley in Turkmenistan," In the collection: Voprosy krayevoy, obshchey, i eksperim. parazitologii, Vol. IV, Moscow, 1949, p. 83-86, - Bibliog: 9 items.

SO: U-4393, 19 August 53, (Letopis 'Zhurnal 'nykh Statey', No. 22, 1949).

LATYSHEV, N. I.

PA 52/49T7

USSR/Academy of Sciences  
Medicine - Prizes

May 49

"Competition for I. I. Mechnikov Prize" 3 pp

"Dok Ak Nauk SSSR" Vol LXVI, No 2

Among 12 works submitted in 1948 Mechnikov Prize competition were: A. G. Alekseyev's "Morphophysiological and Experimental Observations on Normal Blood Elements in Mammals. Genesis of the Macrophage" and "Observations on Clinical Hematology. Clinical Value of Eosinophils," A. Ya. Vilenchuk's "A Filtered Form of Pale Spirochetes," L. V. Gromashevskiy and G. M. Vayndrakh's "Specific Epidemiology," N. I. Latyshev's edition of works on "Etiology," "Epidemiology," "Prophylaxis and Preventive Measures," and "Instruction of Cutaneous Leishmaniasis," Sh. D. Moshkovskaya's "Functional Parasitology" and "Cytotropic Stimuli of Infection and Site of Rickettsiae in the System of Chlamydozoa," and G. K. Khrushchev's "Role of Blood Leucocytes in Healing Wounds."

KATYSHEV, N.I.; KOZHEVNIKOV, P.V.; POVALISHINA, T.P.

[Borovskii's disease; cutaneous leishmaniasis, Pendinskii ulcer,  
Ashkhabad ulcer] Bolezn' borovskogo; kozhnyi leishmanioz, pendin-  
skaia iazva, ashkhabadskaia iazva. Moskva, Medgiz, 1953. 177 p.  
(MLRA 7:2)

(Skin--Diseases) (Ulcers)

LATYSHEV, N. [I.]

Soccer

According to precise rules. Fizk. i sport 23, No. 3, 1953.

Monthly List of Russian Acquisitions, Library of Congress  
June 1953. UNCL.

LATYSHEV, N.I.

POPOV, P.P., professor

"Borovskii's disease." [Cutaneous leishmaniasis] N.I.Latyshev,  
P.V.Koshevnikov, T.P.Povalishina, Reviewed by P.P.Popov. Vest.  
ven. i derm. no.3:59 My-Je '54. (MLRA 7:8)  
(LEISHMANIOSIS) (SKIN--DISEASES)

LATYSHEV, N.K.

Insects parasitizing on pine in the Bashkir Preserve. Trudy Bash.  
gos.zap. no.2:95-105 '63. (MIRA 18:5)

BABENKO, A.F.; LATYSHEV, N.M.

Investigating and eliminating causes of low ductile properties of a  
cable wire with high carbon content. Nauch.zap.Od.politekh.inst.14:56-68  
'59. (MIRA 14:3)

(Wire—Testing)

LATYSHEV, P.

Award of the lofty title of "communist labor group." Zdrav. Bel. 7  
no.6:69 Je '61. (MIR 15:2)  
(VOLOZHINO (MOGILEV DISTRICT)---DRUGSTORES)

LATYSHEV, S.

Designers should be interested. Izobr. i rats. no.12:5 D '59.  
(MIRA 13)

1. Redaktor gazety "Sel'skoye khozyaystvo" po otdelu mekhanizatsii.  
(Vacuum pumps)

LATYSHEV, S.A.; Burova, A.I., red.; STRONGIN, V.L., red.

[Handbook and guide to the boarding houses of the health resorts  
administration] Spravochnik-putevoditel' po pansionatam Kurort-  
torgov. Izd.2., ispr.i dop. Moskva, Gos.izd-vo torg.lit-ry,  
1959. 57 p.  
(HEALTH RESORTS, WATERING-PLACES, ETC.)  
(MIRA 12:8)

VOSKOBONIK, E.Z.; LATYSHEV, S.K.; GARKAVI, Ya.N.

"Traction drives of electric rolling stock" by A.A.Shatsillo.  
Reviewed by E.Z.Voskoboinik, S.K.Latyshev, IA.N.Garkavi. Vest.  
elektroprom. 33 no.6:72 Je '62. (MIRA 15:7)  
(Electric railroads--Rolling stock)  
(Electric railway motors) (Shatsillo, A.A.)

JATYSHEV, S.K., kand. tekhn. nauk; VISTK, N.G., kand. tekhn. nauk;  
BEZRUCHENKO, V.N., inzh.; VARCHENKO, V.K., inzh.

Principal results of stationary tests of industrial D150 and  
D100M electric locomotives. Sbor. trud. NIIT no.39:120-148  
'63. (MIRA 18:4)

LATYSHEV, S.K., kand.tekhn.nauk, dotsent.

General diagram used for measuring power in multiphase circuits.  
Trudy DIIT no.26:178-190 '58. (MIRA 11:7)  
(Electric measurements)

LATYSHEV, S.K., dots.; PODOL'SKIY, L.P., inzh. (Dnepropetrovsk)

~~"Principles of electric traction"~~ by S.I. Osipov, K.A. Mironov.  
Reviewed by S.K. Latyshev and others. Zhel. dor. transp. 40 no.6:  
95-96 Je '58. (MIRA 11:6)  
(Electric railroads)

LATYSHEV, S.K., inzh.; VISIN, N.G., inzh.; GET'MAN, Yu.V., inzh.

Some conclusions derived from the testing of VL23 electric  
locomotives. Elek. i tepl. tiaga 4 no. 12:11-12 D '60.  
(MIRA 14:1)

(Electric locomotives--Testing)

LATYSHEV, S.Kh., operator; SAYGAREYEV, G.B., operator; KHAYRUTDINOV, G.Kh.,  
operator.

Simplified free-flowing well equipment. Bezop.truda v prom.  
(MIRA 11:3)  
2 no.3:17 Mr '58.

1. Neftepromyslovoye upravleniye Bugul'maneft'.  
(Oil wells--Equipment and supplies)

FUNT, N.; LATYSHEV, V.; CHUDAKOVA, Ye, agronom; NAYDIN, P.G., professor.

Local placement of mineral fertilizers. Nauka i pered. op. v  
sel'khoz. 6 no.11:80-82 N '56. (MLRA 10:1)

1. Glavnny agronom Brynskoy mashinno-traktornoy stantsii (for Laty-  
shev). (Fertilizers and manures)

STARKOV, P.M., prof., red.; AKOPOV, I.E., prof., red.; KOSTIN, A.P.,  
prof., red.; PYATNITSKY, N.P., prof., red.; LATYSHEV, V.A.,  
dots., red.; AGANYANTS, Ye.K., kand. med. nauk, red.

[Materials of the 14th Conference of Physiologists of the  
Southern R.S.F.S.R.] Materialy Konferentsii fiziologov iuga  
RSFSR Krasnodar, Vses. fiziologicheskoe ob-vo im. I.P.  
Pavlova, 1962. 406 p. (MIRA 17:9)

1. Konferentsiya fiziologov yuga RSFSR. 14th, Krasnodar, 1962.
2. Kafedra normal'noy fiziologii Kubanskogo meditsinskogo instituta, Krasnodar (for Aganyants).
3. Zaveduyushchiy kafedroy farmakologii Kubanskogo meditsinskogo instituta, Krasnodar (for Akopov).
4. Zaveduyushchiy kafedroy fiziologii zhivotnykh Kubanskogo sel'skokhozyaystvennogo instituta, Krasnodar (for Kostin).
5. Zaveduyushchiy kafedroy anatomi i fiziologii Krasnodarskogo pedagogicheskogo instituta (for Latyshev).
6. Zaveduyushchiy kafedroy biokhimii Kubanskogo meditsinskogo instituta, Krasnodar (for Pyatnitskiy).
7. Zaveduyushchiy kafedroy normal'noy fiziologii Kubanskogo meditsinskogo instituta, Krasnodar (for Starkov).

LATYSHEV, V. A.

"Some Rules of the Morphological Interrelation Between the Nervous and Muscular Systems." Cand Biol Sci, Inst of Physiology, Acad Sci USSR, Leningrad, 1953. (RZhBiol, No 1, Sep 54)

SO: Sum 432, 29 Mar 55

USSR/Human and Animal Morphology (Normal and Pathological) Nervous S  
System.

Abs Jour : Ref Zhur - Biol., No 7, 1958, No 31246

Author : Letyshev V.A.

Inst : Not Given

Title : On the Ontogenesis of Peripheral Organs of Muscular Sense  
(Nouromuscular Spindles) of Man and of Mammals.

Orig Pub : Uch. sap. Krasnodarsk. gos. ped. in-t, 1956, vyp. 18, 170-183

Abstract : Formation of nouromuscular spindles (NMS) in delicate and sartorius muscles of man begin in the second month of prenatal life. Toward the end of the third month, NMS are represented by small clusters of so-called intrafusal muscle fibers. In fetuses of 4-5 months, NMS possess a type of two degree capsula, constructed from a connective tissue joint which encloses an increasing number of intrafusal fibers. The connective tissue joint is split into two leaves, between which there is a closed perilymphatic cavity filled by serous fluid, fibers and cellular elements. Terminal sensory nerve

Card : 1/2

USSR/Human and Animal Morphology. Nervous System.

S

Abs Jour: Ref Zhur-Biol., No 15, 1958, 69604.

Author : Latyshev, V.A.

Inst : Krasnodar State Ped. Institute.

Title : Certain Laws of Morphology of the Peripheral  
Organs of Muscular Sensation (the Muscle Spindles)  
of Man and Mammals.

Orig Pub: Uch. zap. Krasnodarsk. gos. ped. in-t., 1957,  
No 19, 197-209.

Abstract: Three types of spindles in skeletal muscle are  
distinguished: simple, consisting of one to ten  
intrafusal fibers; compound, composed of 10-20  
intrafusal fibers; and complex spindles, which  
are a variant of the compound. Comparison of

Card : 1/2

14

USSR / Human and Animal Morphology. Nervous System. S-2  
Peripheral Nervous System.

Abs Jour: Ref Zhur-Biol., No 14, 1958, 64806.

Author : Latyshev, V. A.

Inst : Krasnodar State Ped. Institute.

Title : Concerning Growth Morphology of the Muscular  
Branches of the Peripheral Nerves in Man and Mam-  
mals.

Orig Pub: Uch. zap. Krasnodarsk. gos. ped. in-t, 1957,  
vyp. 19, 211-218.

Abstract: A histological study, computing the number of  
nerve fibers and measuring thickness of the myelin  
membrane and axis cylinders was made of 26 muscle  
branches of the peripheral nerves of man in 11  
cadavers, and of 55 branches of the cat, in 17  
cadavers. It has been shown that with age a fur-

Card 1/2

PAVLOV, K.V.; LATYSHEV, V.A.

Study of the effect of drilling techniques on the working parameters  
of drills. Vzryv. delo no.46/3:67-78 '61. (MIRA 15:1)  
(Boring)

**PAVLOV, K.V.; LATYSHEV, V.A.**

Design, construction, and use of air legs. Izv. AN Kir. SSR.  
Ser. est. i tekhn. nauk 3 no.3:103-114 '61. (MIRA 15:3)  
(Rock drills) (Pneumatic tools)

LATYSHEV, V.D.

Work practice of the Rodnikovskaya hospital medical workers in  
the preventive and therapeutic service rendered to machine-tractor  
station and collective farm workers. Med. sestra no.6:27-30 Je '54.  
(MLRA 7:8)

1. Glavnnyy vrach Rodnikovskoy bol'nitsy (Krasnodarskiy kray)  
(MEDICINE, RURAL)

LATYSHEV, V.D.

Medical service to collective farm workers at field camps. Med.  
sestra no.7:3-5 J1 '55. (MLRA 8:9)

1. Glavnyy vrach Rodnikovskoy bol'nitsy (Krasnodarskiy kray)  
(PUBLIC HEALTH,  
med.serv. on field camps in Russia)

LATYSHEV, V.D.

Role of nurses of the Rodnikovskaya Rural Hospital in the dispensary  
treatment of the public. Med.sestra 19 no.1:8-12 Ja '60.

(MIRA 13:5)

1. Glavnyy vrach stanitsy Rodnikovskaya Kurganinskogo rayona Krasnodarskogo kraya.

(RODNIKOVSKAYA (KRASNODAR TERRITORY)--NURSES AND NURSING)

LATYSHEV, V.D.

How and why we review the public health centers. Med. sestra 20  
no.7:33-35 Jl '61. (MIRA 14:10)

1. Glavnnyy vrach Rodnikovskoy bol'nitsy Kurganinskogo rayona Krasnodar-  
skogo kraya.  
(KRASNODAR TERRITORY--PUBLIC HEALTH, RURAL)

SOV/32-25-1-45/51

7

AUTHORS:

Domarev, N. M., Latyshev, V. F.

TITLE:

Tensiometer for Measuring the Deformation of the Sample on the Joint Action of Axial Load and Torsional Moment (Tenzometr dlya zamera deformatsiy obraztsa pri sovmestnom deystviu osevoy sily i krutyyashchego momenta)

PERIODICAL:

Zavodskaya Laboratoriya, 1959, Vol 25, Nr 1, pp 120-120 (USSR)

ABSTRACT:

The described tensiometer was constructed under the supervision of E. I. Grigolyuk, Doctor of Technical Sciences. This instrument makes possible the simultaneous measuring of axial and angular deformations of samples (diameter from 10 to 30 mm) in the elastic and elasto-plastic range. The modulus of elasticity  $E$ , the bending modulus  $G$  and the Poisson (Poisson) coefficient  $\mu$  can be determined. The tensiometer (Fig) consists of two main parts which are supported by two plates (of U8 steel); each part operates individually. The axial deformations are measured on a 100 mm basis by two micron indicators. The angular deformations are determined by a third indicator which measures with an accuracy of 0.0001 mm the chord of the central angle of the torsional angle over a length of 100 mm. The two

Card 1/2

SOV/32-25-1-45/51

Tensiometer for Measuring the Deformation of the Sample on the Joint Action  
of Axial Load and Torsional Moment

parts of the tensiometer are clamped together before they are mounted on the sample; this is carried out by means of a scale on the supporting clamp (of 30KhGSA steel). A description of the tensiometer is mentioned based on the diagram given.

Card 2/2

S/179/63/000/001/023/031  
E081/B135

AUTHORS: Domarov, N.M., and Latyshev, V.F. (Moscow)

TITLE: Machine for testing metals in creep and long-term strength under complex stress conditions YVMT-1500 (UIMT-1500)

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk. Mekhanika i mashinostroyeniye, no.1, 1963, 163-166

TEXT: The machine is designed to apply three types of stress: axial stress with tension up to 1500 kg and compression up to 800 kg; torsion with twisting moment up to 30 kg-m; internal pressure up to 500 kg/cm<sup>2</sup> (produced by inert gases). The three loading mechanisms can be operated simultaneously, and tests can be carried out at temperatures up to 1200 °C. The specimens are thin walled tubes with a working diameter of 15 - 16 mm and a working length of 100 mm. Axial and angular deformations are measured with extensometers. A detailed description is given of the machine, together with drawings and a photograph. Stress-strain curves at room temperatures for all three types of loading on Card 1/2

Machine for testing metals in creep... S/179/63/000/001/023/031  
E081/E135

steel 1X18H9T (1Kh18N9T) are given as examples of the results obtained.  
There are 6 figures.

SUBMITTED: June 12, 1962

Card 2/2

LATYSHEV, V.G.

ZUBOVSKIY, G.I.; LATYSHEV, V.G.; NOVITSKIY, L.A.

Use of SKS-1 high-speed motion-picture cameras for the photographing  
of distant objects. Zhur. nauch. i prikl. fot. i kin. 3 no.2:131-135  
Mr-Ap '58. (MIRA 11:5)

(Cinematography)

LATYSHEV, V. I.

36431. Patologoanatomicheskaya kharakteristika ostrogo pristupa appenditsita. Sov.  
vracheb. Sbornik. Vyp. 16, 1949, S. 26-28

SO: Letopis' Zhurnal'nykh Statey, No. 49, 1949

LATYSHEV, V.I., gornyy master

Mining foreman must be an educator of workers. Bezop. truda v  
prom. 2 no. 6:3 Je '58. (MIRA 11:?)

1. Shakhta No. 1 tresta Krasnoluchugol', Donbass.  
(Coal mines and mining--Safety measures)

MEDVEDEV, S.V.; LATYSHEV, V.K.

New methods for fluid level measuring using radioactive isotopes.  
Priborostroenie no.8:6-9 Ag '56. (MLRA 9:10)

(Radioactive tracers--Industrial applications)  
(Measuring instruments)

LATYSHEV, V.K.

Remodeling the B-1-type apparatus for use with halogen counters.  
Zav.lab.22 no.7:866-867 '56. (MLRA 9:12)

1. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii.  
(Radioactivity--Measurement)

LATYSHEV, V.K.; FELINGER, A.A.

Logarithmic electronic converter for recording microphotometers.  
Zav. lab. 23 no. 5:630-632 '57. (MLRA 10:8)

I. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metal-lurgii.  
(Microphotometer) (Electronic instruments)

L A T Y S H E V , U . K .

21 (1) Printed in the USSR  
237/764  
Vsesoyuznoye nauchno-tekhnicheskoye izdatelstvo po radiofizike i radiohemii  
Gosudarstvennyy i sotsial'nyy sekretariyat po nauchno-tekhnicheskoy radiotekhnicheskoy i radiochimicheskoy promstremosti  
Sovet SSSR po radiofizike i radiohemii, 1957.

Pechatno-tretyakovskaya Printseverstroy (representatives of the All-Union Conference on the Use of Radioactive and Stable Isotopes and Radiation in the National Economy and Defense, Technical and Industrial Manufacturing Plants)

Russia, Moscow, 1958. 358 p., 1,500 copies printed.

Sponsoring Agency: USSR, Glavnoye upravleniye po ispol'sovaniyu atomnoy energii, and Akademicheskaya nauka SSSR.

Editorial Board (Deputy Rep. Eds.) Yu. N. Smirnov, I. L. Verzhbitskaya, B. F. Matarov, L. I. Patens (Ed.), L. E. Trubchinskaya, M. G. Zel'divinskaya (Secretary).

No. of Publishing House: P.M. Belovinskii Tech. Ed.: T.P. Polenova.

PURPOSE: This book is intended for specialists in the field of machine and instrument manufacture who use radioactive isotopes in the study of materials and processes.

COVERAGE: This collection of papers covers a very wide field of the utilization of tracer methods in industrial research and control techniques. The topic of this volume is the use of radiotopes in the machine and instrument manufacturing industry. Individual papers discuss the applications of radiotopes. Techniques in the study of metals and alloys, problems of detection and lubrication, metal cutting, engine performance, and defects in metals. Several papers are devoted to the use of radiotopes in the automation of industrial processes, recording and measuring devices, quality control, flowmeter, level gauges, safety devices, radiation counters, etc. These papers represent contributions of various Soviet institutes and laboratories. They were published as transactions of the All-Union Conference on the Use of Radioactive Isotopes and Radiation in the National Economy and Defense and State Scientific and Research Institute of Radioelectronics and Science, April 1957. No. 2000. 120 pp.

Barkin, I. M., A. M. Borzakov, L. A. Brodskiy, B. T. Fyodorov, A. N. Makarov, N. S. Novitskaya, and A. A. Rubinstein (editors). Labor. avtomatiki Minvysch. nauchno-tekhnicheskogo (Institute of Labor. avtomatiki Ministry of Sciences and Technology SSSR). Leningrad. "Zaporozhets," 1957. 240 pp. (Proceedings of the Second All-Union Conference on the Use of Radiotopes in the Metalworking Industry - Central Automation Laboratory of the Ministry of Ferrous Metallurgy, USSR). Institute of Physics (Academy of Sciences, Leningrad). Leningrad Steel Rolling Mill and Steel Rope Plants Metalurgical Plant, Zaporozhets (Zaporozhets, Zaporozhets, Zaporozhets, Zaporozhets). Certain Problems for Designing of Solid Steel and Castings. 236

Morozhenko, M. S. (Institute of Zaporozhets). "Zaporozhets" - Zaporozhets, 1957. 240 pp. (Proceedings of the Second All-Union Conference on the Use of Radiotopes in the Metalworking Industry - Central Automation Laboratory of the Ministry of Ferrous Metallurgy, USSR). Institute of Physics (Academy of Sciences, Leningrad). Leningrad Steel Rolling Mill and Steel Rope Plants Metalurgical Plant, Zaporozhets (Zaporozhets, Zaporozhets, Zaporozhets, Zaporozhets). Certain Problems for Designing of Solid Steel and Castings. 236

Orshanskiy, Ya. Ya. (Konstruktorskoye byuro "Tsvetmetavtostal"). Use of Thickness Gauges at the "Zaporozhets" Plant. 240

Rukav, I. M. and V. A. Yemel'yantsev (Institut fiziki i radiohemii RAN). Leningrad. "Zaporozhets," 1957. 240 pp. (Institute of Physics and Radiochemistry of the USSR Academy of Sciences). Consideration of the Control, Signal Statistics in Recording Radioactive Radiation With Reiley-type Instruments 241

Latyshev, V. M., V. V. Lomidze, S. V. Medvedev, Yu. S. Pishchik, I. N. Tikhonov, and V. I. Shul'tsev (editors). "Metall. i metallovedeniye i radiofizika." Metallovedeniye i radiofizika (Metal and Metallochemistry and Radiation Processing). Institute of Metal Physics, Academy of Sciences, Latvian SSR. Certain Problems in Designing Gamma-Ray Level Indicators. 247

Ovcharenko, Ya. Ya. (Konstruktorskoye byuro "Tsvetmetavtostal"). Use of Scientific Engineering Office of "Tsvetmetavtostal". Use of Thickness Gauges for Radiation Recording. 252

Shnor, E. M., and V. A. Janushkevich (Institut fiziki i radiohemii RAN). Leningrad. "Zaporozhets," 1957. 240 pp. (Institute of Physics and Radiochemistry of the USSR Academy of Sciences). Portable Radioactive Level Indicators. 255

Brat, Ye. A. Level Indicators for Pre-fluxing Materials. 258

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L A T Y S H E V, U.K.

THE JOURNAL OF CLIMATE

Final report on the first phase of the project to evaluate the impact of the National Center for Health Statistics and its Bureau of Vital Statistics and the Bureau of the Census on the National Health and Nutrition Examination Survey (N.H.E.A.T.S.). NCHS, 1958. 358 p., 1,550 copies printed.

Spouznenie Juventeet UZCH. Glavnaya upravleniye po ispol'zovaniyu atomnoy energii, and Akademiya nauk SSSR.

Editorial Board of Set: V.I. Dikushin, Academician (Resp. Ed.), K.I. Shumilov (Deputy Resp. Ed.), Yu. S. Zelavsky (Deputy Resp. Ed.), L.K. Tatchenko, B.I. Verchovskiy, S.Y. Nararov, L.I. Petrin and N.G. Zelavskaya (Secretary).

The study of materials and processes.

**OVERVIEW:** This collection of papers covers a very wide field of the utilization of tracer methods in industrial research and control techniques. The topic of the first paper is the use of radiotopes in the machine- and instrument-manufacturing industry. The individual papers discuss the applications of radiotopic techniques in the study of metals and alloys, problems of friction and lubrication, metal cutting, engine performance, and defects in metals. Several papers are devoted to the use of radiotopes in the automation of industrial processes, recording and measuring devices, quality control, flowmeters, level gauges, safety devices, radiation counters, etc. These papers represent contributions of various Soviet institutes and laboratories. They were published at the sessions of the All-Union Conference on the Use of Radiotopic and Gravimetric Radiotopes and Radiation in the National Economy and Science, April 12-17, 1957. No personalities are mentioned. References are given at the end of most of the papers.

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France, T. V. (Ministerio de Asuntos Exteriores) - Under Ministry of Communications. Determination or Loss in the Lead Sheath of Communication Cables

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**Kharchenko, M.K.** (Institut metallovedeniya i zhidkochislennogo modelirovaniya — Institut of Metallography and the Practice of Metals Processing). Ionization Method of Gamma Defectoscopy. 304

Chungel'keldz, A.A., and G.D. Davtyan (Leningradsky Institute of Hygiene, A.M. Abovyan, and N.D. Arsent'yev). "Feen'tsii'yu nauchno-issledovatel'skogo in-ta po patologicheskoy radiologii — Central Scientific Research Institute of Pathology and Radiopathology." Use of Scintillation Counters in Electron Defect-

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LATYSHEV, V.K.; FELINGER, A.K.

Logarithmic electron transducer for MF-4-type microphotometers.  
Probl. metalloved., fiz. met. no. 6:453-459 '59. (MIRA 12:8)  
(Transducers) (Microphotometer)

26.2191

41994  
S/263/62/000/020/006/006  
E194/E114AUTHOR: Latyshev, V.K.

TITLE: Application of radioactive isotopes to the determination of levels

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk, Izmeritel'naya tekhnika, no.20, 1962, 32-33, abstract 32.20.227. (Sbornik Tr. In-t metalloved. i fiz. metallova Tsentr. n.-i. in-ta chernoy metallurgii, v.6, 1959, 499-511)

TEXT: A knowledge of the time- and temperature-stability of halogen-counter parameters is important in the determination of levels with the aid of radioactive isotopes. Results are reported of experiments with the two most widely used counters, CTC-1, (STS-1) and CTC -8 (STS-8). Graphs are reproduced showing the average current through the counters as a function of the number of pulses for different load resistances. These curves are very nearly linear for load resistances not exceeding  $1 M\Omega$  (both counters). Above  $7 M\Omega$  the graphs are very nonlinear. Analytical expressions are reported for these curves and graphs are reproduced

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S/263/62/000/020/006/006  
Application of radioactive isotopes... E194/E114

showing the average current at different counting rates for the STS-1 counter (20 000, 8 000 and 200 p.p.s.) during continuous operation for 60 hours. Graphs are also given of the average current and the number of pulses as functions of temperature for the STS-8 counter. It is clear from the latter that, under average current conditions, temperatures up to 45° may be used, while under pulse operation the temperature is 60°. In the level meters Ny-4 (IU-4), Ny-3 (IU-3), Ny-6 (IU-6) and Ny-7 (IU-7) the above counters are used under average current conditions and are placed in series with integrating circuits whose output is fed into amplifiers incorporating triodes and thyratrons. The anode circuits include indicator lamps in the case of IU-7, relays in the case of IU-6 and IU-4, and an output meter in the case of IU-3. [Translator's note: this sentence is not clear in the original.] All the circuits are simple and contain a small number of tubes. The output of IU-3 is automatically recorded, the working range being 150 mm and the accuracy  $\pm$  5 mm. The IU-4 is designed for determination of the level of liquids in cylinders and has a rheocord for remote transmission of readings and audible warning

Card 2/3

LATYSHEV, V.K.; PLISKIN, Yu.S.; TATOCHENKO, L.K.

Automatic level control for continuous steel pouring. Probl.  
metalloved.i fiz.met. no.6:512-519 '59. (MIRA 12:8)  
(Liquid level indicators) (Liquid metals)

24,6810

82882

S/120/60/000/02/013/052

E052/E31<sup>4</sup>  
AUTHORS: Vasichev, B.N., Il'ina, V.A., Latyshev, V.K. and  
Pliskin, Yu.S.

TITLE: A Scintillation Counter for the Recording of X-rays

PERIODICAL: Pribory i tekhnika eksperimenta, 1960, Nr 2,  
pp 51 - 56 (USSR)

ABSTRACT: The recording of soft radiation by scintillation counters, e.g. in X-ray diffraction work, is complicated by the fact that the working pulses are comparable in magnitude with the noise pulses. In the present work, this difficulty is removed by using the coincidence circuit shown in Figure 1a, which is based on two crystal diodes. The points  $B_1$  and  $B_2$  are the inputs connected to the anodes of two photomultipliers and the output of the circuit is at A. The resistor  $R_3$  is much smaller than  $R_1$  and  $R_2$ . The diode circuits and the resistance  $R_3$  are such that the potential at the point A is determined by the smaller of the potentials at  $B_1$  and  $B_2$ .

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E032/E314

A Scintillation Counter for the Recording of X-rays

Figure 1 shows the output voltage as a function of currents flowing through the resistors  $R_1 = R_2 = 12 \text{ k}\Omega$ . As can be seen from these curves, a reduction in the current  $I_1$  by a factor of 2 leads to a reduction in the output voltage by about 10% (the working point is displaced from M to N). The simultaneous reduction in the currents through  $R_1$  and  $R_2$  by a factor of 2 leads to a reduction in the output voltage also by a factor of 2 (the working point is displaced from M to P). Thus the appearance of a pulse in only one of the photomultipliers leads to a small anticoincidence pulse at the output, while the appearance of simultaneous pulses at the two anodes leads to a large output pulse equal in amplitude to the smaller of the two input pulses. In order to ensure low resolving time,  $R_1$ ,  $R_2$  and  $R_3$  must be shunted by parasitic capacitances as small as possible. The diodes  $A_1$  and  $A_2$  are attached to the point A by short pieces of cable, having a natural *H*

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S/120/60/000/02/013/052

E032/E314

**A Scintillation Counter for the Recording of X-rays**

capacitance of 27 pF/m.  $R_3$  forms the input resistor of a cathode follower which decouples this resistor from the capacitance of the connecting cable. The resolving time of this system, determined with the aid of a delay line, was found to be  $10^{-7}$  sec. Figure 2 shows the integral noise spectrum for the two photomultipliers taken separately (Curves a and  $\delta$ ) and the spectrum obtained with the coincidence circuit (Curve B). Figure 3 shows the block diagram of the instrument. The pulses from the coincidence circuit are fed into an amplifier in series with a discriminator, and the output of the discriminator is recorded either by a scaling unit or by a ratemeter working in conjunction with a pen recorder. The basic circuit of the instrument as a whole is shown in Figure 4. Figure 5 shows the high-voltage rectifier employed. Figure 6 shows the amplifier and the single-channel kicksorter. Figure 7 indicates the method of mounting of the sodium iodide crystals between the photomultipliers. Typical spectra obtained are shown in Figures 8-10. The efficiency of the counter

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S/120/60/000/02/013/052

E032/E314

A Scintillation Counter for the Recording of X-rays

was found to be of the order of 90% in a wide wavelength region (between the chromium and molybdenum radiations). The system can thus be used successfully at all wavelengths normally employed in X-ray analysis. There are 10 figures, 1 table and 16 references, 8 of which are Soviet and 8 English.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii (Central Scientific-Research Institute for Ferrous Metallurgy)

SUBMITTED: March 9, 1959

Card 4/4

LATYSHEV, V. K., GAND TECH SCI, "DEVELOPMENT OF RADIO-  
ACTIVE FEELERS OF LIQUID METAL LEVELS FOR PURPOSES OF  
AUTOMATION OF CONTINUOUS TEENING OF STEEL." MOSCOW, 1961.  
(MOSCOW ENG AND PHYS INST). (KL, 2-61, 209).

-146-

S/137/61/000/012/083/149  
A006/A101

AUTHORS: Latyshev, V. K., Pliskin, Yu. S., Matochenko, L. K., Felinger, A. K.

TITLE: A device to measure the thickness of rolled sheets

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 12, 1961, 14, abstract 12D93  
(V sb. "Radioakt. metody kontrolya i regul. proizv. protsessov",  
Riga, AN LatvSSR, 1959, 73-9)

TEXT: TsNIIChM developed a device to measure the thickness of rolled sheets (for a thickness  $\geq 7$  mm) operating by the system of dynamic compensation. Unlike the method of static compensation, this system is free of mechanical feed-back and variable shifts. The measuring device makes it possible to record changes in thickness by 0.2 mm at 35 mm total thickness of the sheet, and an intensity of the measuring Co<sup>60</sup> source on the order of 15 Curie. The measuring unit of the device is not connected with the kinematic drive, causing the motion of the wedge. This makes it possible to accelerate the operational speed of the device by increasing the shifting speed of the wedge. Compensation in the system is brought about by changing the amplification factor of the photomultiplier by varying the voltage on the dynode. V. D'yakov

[Abstracter's note: Complete translation]

Card 1/1

S/081/62/000/009/031/075  
B158/B101

AUTHOR: Latyshev, V. K.

TITLE: The use of radioactive isotopes for measuring levels

PERIODICAL: Referativnyy zhurnal, Khimiya, no. 9, 1962, 168-169, abstract  
9Ye30 (Sb. tr. In-t metallocoved. i fiz. metallov Tsentr. n.-i.  
in-ta chernoy metallurgii, v. 6, 1959, 499-511)

TEXT: The design of gamma level-gauges (GLG) for the measurement of liquid levels in sealed vessels is described. The operation of the GLG is based on the difference in absorption of  $\gamma$ -rays according as these pass above or below the liquid level. The basic parts of the instrument are: a source of radioactive radiation, a Geiger-Müller counter and an electronic system for transmission of a signal or switching in a relay when the liquid level has reached a definite position. The Geiger-Müller counters do not operate on the usual impulse system but on an average current system. This substantially simplifies the design and makes the instruments more reliable in operation. [Abstracter's note: Complete translation.]

Card 1/1

S/137/62/000/003/010/191  
A006/A101

AUTHORS: Latyshev, V. K., Pliskin, Yu. S., Tatochenko, L. K.  
TITLE: An automatic level regulator for a continuous steel-teeming unit  
PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 11, abstract 3B67  
("Sb. tr. In-t metalloved. i fiz. metallov Tsentr. n.-i. in-ta  
chernoy metallurgii", 1959, v. 6, 512-519)  
TEXT: In the Soviet Union the automatic control of the liquid steel level  
in the crystallizer of a continuous casting unit was for the first time developed  
in 1955 at the Plant imeni 1st May of MES USSR. In this unit the level control  
was brought about by changing the speed of drawing the ingot. The regulation  
of the roll speed was first carried out manually with the aid of a rheostat  
connected to the excitation circuit of the generator. However, at a speed of  
drawing the ingot, raised to 4 m/min (and in future to 7 m/min according to  
projects) manual control becomes impossible. At the Institute of Metal Working  
and Physics of Metals, TsNIICM developed the PV-2 (RU-2) type automatic level  
control device. Its schematic diagram is given and the operational principle

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An automatic level regulator ...

S/137/62/000/003/010/191  
A005/A101

is described. The static calculation of the control system is also presented.

G. Lyubimova

[Abstracter's note: Complete translation]

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32601  
S/137/61/000/011/034/123  
A060/A101

## AUTHORS:

Valov, A.N., Latyshev, V.K., Lyndin, V.V., Pliskin, Yu.S.

## TITLE:

Application of radiometric transducers in systems for regulating the level of molten metal in crystallizers of continuous casting machines

## PERIODICAL:

Referativnyy zhurnal. Metallurgiya, no. 11, 1961, 67, abstract 11V392 (v sb. "Radioakt. izotopy i yadern. izlucheniya v nar. kh-ve SSSR. v. 3", Moscow, Gostoptekhizdat, 1961, 147 - 149)

TEXT: The authors describe the principle of operation of a level regulator. The sensor is in the form of a source and receiver of radioactive radiation, which are situated on the opposite sides of the object of measurement. The source is Co<sup>60</sup> and the receiver is a gaseous ion counter of the type СИ-1Г (SI-1G). A short description is given of the system of automatic control for the level of the molten metal in the crystallizer of a vertical machine for the continuous casting of steel in ingots of small cross section at the plant imeni the First of May; of a machine for semi-continuous casting of cast iron tubes of the Sinarskiy tube factory; of a machine installed at the Bezhitsa plant. In all the cases

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Application of radiometric transducers ...

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S/137/61/000/011/034/123  
A060/A101

the regulation proceeds by acting upon the rate of drawing out the article being cast. At the Novo-Tul'skiy metallurgical plant a system was tried out for the automatic regulation of the metal in the crystallizer by varying the quantity of metal fed into the crystallizer.

Yu. Nechkin

[Abstracter's note: Complete translation]

Card 2/2

S/137/61/000/012/082/149  
A006/A101

AUTHORS: Vasichev, B. N., Latyshev, V. K., Pliskin, Yu. S., Felinger, A. K.,  
Lyubchenko, A. A., Farfel', Yu. A., Lebedev, O. P., Ivanov, V. I.

TITLE: A device to measure the thickness of hot rolled metal

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 12, 1961, 13-14, abstract  
12D92 (V sb. "Radioakt. izotopy i yadern. izlucheniya v nar. kh-ve  
SSSR, vol. 3" Moscow, Gostoptekhizdat, 1961, 205, 206)

TEXT: An instrument for measuring the thickness developed at TsNIIChM,  
is based on the method of dynamic compensation. The device consists of a receiving unit, a container of the measuring source, an electric driven clamp, a feed unit, a recording and an indicating unit. To control the operation of the device a coarse-wedge sector is mounted. The device is employed in a thickness range from 14 to 44 mm; it can however be designed for any range within 5 to 50 mm. In the case of the given model the device is an indicating one. It is intended to be incorporated into the programming unit, controlling the clamping screws of the mill, as a correcting device on periodic-rolling mills, and as an indicator in an automated reduction control system on continuous mills. The accuracy

Card 1/2

A device to measure the thickness ...

S/137/61/000/012/082/149  
A006/A101

of the device is  $\pm 0.1$  mm on the whole range; the operational speed is one measurement per second.

N. Yudina

[Abstracter's note: Complete translation]

Card 2/2

S/194/62/000/006/108/232  
D256/D308

AUTHORS: Latyshev, V.K., and Felinger, A.K.

TITLE: Logarithmic electronic converter for Mφ-4 (MF-4)  
type microphotometer

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,  
no. 6, 1962, abstract 6-5-10 f (Sb. tr. In-t metallo-  
ved. i fiz. metallov Tsentr. n.-i. in-ta chernoy me-  
tallurgii, 1959, 6, 453-459)

TEXT: An electronic supplementary unit for the MF-4 type micropho-  
tometer was developed and tested in industrial conditions by TsNII-  
chermet. The unit consists of a log converter, an amplifier and a  
power supply unit. The log converter employs a single triode 6H8  
(6N8) whose grid circuit is used as a diode with an exponential  
volt-ampere characteristic, while the anode circuit serves as an  
amplifier. The logarithmic dependence of the 6N8 anode current upon  
the grid current was obtained for grid currents ranging from 0.01  
to 10 mA at  $U_a = 25$  V and  $U_f = 3.5$  V. The second half of the 6N8



Card 1/2

Logarithmic electronic converter ...

S/194/62/000/006/108/232  
D256/D308

tube is used as a compensating stage. A balancing circuit is provided for recording the photometric data using another 6N8 tube; the signal is derived from a part of the cathode resistance and fed into ЭПП-09 (EPP-09) type electronic potentiometer. The circuit diagram of the adapter and a photograph of the instrument are given. 2 references. [Abstracter's note: Complete translation.]

Card 2/2

MAKSIMOV, Yu.M., kand.tekhn.nauk; AKINFYEV, V.I., inzh.;  
LATYSHEV, V.K., kand.tekhn.nauk; LYNDIN, V.V., inzh.

I.P. Bardin Central Scientific Research Institute of  
Ferrous Metallurgy. Stal' 23 no.2:131,157-158 F '63.  
(MIRA 16:2)  
(Open-hearth process) (Rolling (Metalwork))

ACC NR: AM6025821

Monograph

UR/

Afanas'yev, Vadim Nikolayevich; Latyshev, Vladislav Konstantinovich;  
Lyndin, Vasilii Vasil'yevich; Felinger, Aleksandr Konstantinovich

Radioisotope instruments in metallurgy (Radioizotopnyye pribory v  
metallurgii) [Moscow] Izd-vo "Metallurgiya," 1966. 224 p. illus.,  
biblio. 2700 copies printed.

TOPIC TAGS: nuclear radiation, radioisotope instrument, radioisotope  
measuring instrument, metallurgy, radioisotope, ~~instrument~~ radiation  
~~detecting device~~, radioactive tracer, industrial nuclear application, metallurgical heating machine

PURPOSE AND COVERAGE: This book is intended for engineering personnel  
specializing in controlling various parameters of technological  
processes by using nuclear radiation and radioisotope measuring  
instruments, especially those instruments which are used in the field  
of metallurgy. The authors summarize data useful for development of  
new instruments which may facilitate dealing with problems of  
metallurgical industry. References accompany every chapter.  
Chapter 1 is written by V. K. Latyshev; Chapter 2—jointly by all the  
authors; Chapter 3 by V. N. Afanas'yev; Chapters 4 and 6 by A. K.  
Felinger; Chapter 5 by V. V. Lyndin and V. K. Latyshev; and Chapters  
7 and 8 by V. V. Lyndin.

Card 1/2

UDC: 539.16.07:669

ACC NR: AM6025821

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SUB CODE: 18, 13/ SUBM DATE: 14Jun65/ ORIG REF: 118/ OTH REF: 035

Card 2/2

ANDREYEV, G.S., kand. tekhn. nauk; BOKUCHAVA, G.V., kand. tekhn. nauk, dots.; BRAKHMAN, L.A., inzh.; BUDNÍKOVA, A.V., inzh.; GORDON, M.B., kand. tekhn. nauk, dots.; ZHAVORONKOV, V.N., inzh.; KARZHAVINA, T.V., kand. tekhn. nauk; KOROTKOVA, V.G., inzh.; KORCHAK, S.N., inzh.; KLUSHIN, M.I., kand. tekhn. nauk, dots.; KUZNETSOV, A.P., kand. tekhn. nauk, dots.; KURAKIN, A.V., inzh.; LATYSHEV, V.N., inzh.; OL'KHOVSKIY, V.N., inzh.; ORLOV, B.M., kand. tekhn. nauk, dots.; OSHER, R.N., inzh.; PODGOROV, V.V., inzh.; SIL'VESTROV, V.D., kand. tekhn. nauk [deceased]; TIKHÓNOV, V.M., inzh.; TROITSKAYA, D.N., inzh.; KHRUL'KOV, V.A., inzh.; LESNICHENKO, I.I., red. izd-va; SOKOLOVA, T.F., tekhn. red.; GORDEYEVA, L.P., tekhn. red.

[Lubricating and cooling fluids and their use in cutting metals]  
Smazochno-okhlazhdaiushchie zhidkosti pri rezaniï metallov i  
tekhnika ikh primeneniia. Moskva, Gos. nauchno-tekhn. izd-vo  
mashinostroit. lit-ry, 1961. 291 p. (MIRA 15:1)  
(Metalworking lubricants)

LATYSHEV, V.N.

Device for determining contact duration of chips with the top  
cutting surface. Stan.i instr. 34 no.5:33-34 My '63. (MIRA 16:5)  
(Metal cutting) (Electronic instruments)

LATYSHEV, V.N.

Industrial testing of a new lubricating and cooling fluid  
in textile machinery plants. Izv. vys. ucheb. zav.; tekhn.  
tekst. prom. no.1:161-164 '64. (MIRA 17:5)

1. Ivanovskiy tekstil'nyy institut imeni Frunze.

ACCESSION NR: AP4042271

S/0145/64/000/005/0173/0179

AUTHOR: Laty\*shev, V. N.

TITLE: Effect on the penetrating capacity of anions in electrolyte solutions and surface active agents on metal cutting processes

SOURCE: IVUZ. Mashinostroyeniye, no. 5, 1964, 173-179

TOPIC TAGS: cutting fluid, cutting fluid electroconductivity, anion penetrating capacity, cutter life, cutting friction coefficient, cutting fluid formulation, metal cutting, surfactant, emulsifying agent

ABSTRACT: Based on a study of the electrical conductivity of numerous cutting fluids, which showed that the properties of such fluids are governed by the group properties of the dissociated anions and cations in them, the author concluded that the penetrating capacity of anions is an important characteristic which should be considered when formulating cutting fluids. He then measured that capacity for numerous solutions of inorganic salts and surface active agents (methodology given) and expressed these as current densities in mA/cm<sup>2</sup>. A group of 23 new cutting fluids (not described) was formulated and tests

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ACCESSION NR: AP4042271

were made to determine the effects of cutting fluids with high anion penetrating capacities on friction coefficients and the life of cutters. Results for steels ShKh 15 and No. 3 indicate decreasing friction coefficients and increasing cutter life with an increase in anion penetrating capacity. Orig. art. has: 6 figures, 1 table and 2 formulas.

ASSOCIATION: Ivanovskiy tekstil'nyy institut (Ivanov Textile Institute)

SUBMITTED: 27Apr63

ENCL: 00.

SUB CODE: IE, MM

OTHER: 000

NO REF SOV: 004

CGP/2

LATYSHEV, V.N.

Zero divisors in finite-dimensional anticommutative algebras.  
Izv. vys. ucheb. zav.; mat. no.2:100-108 '61. (MIRA 14:3)

1. Moskovskiy gosudarstvenny universitet im. M. V. Lomonosova.  
(Fields, Algebraic)

MISHINA, A.P.; PROSKURYAKOV, I.V.; LYUSTERNIK, L.A., red.;  
YANPOL'SKIY, A.R., red.; RASHEVSKIY, P.K., red.;  
LATYSHEV, V.N., red.; PLAKSHE, L.Yu., tekhn. red.

[Higher algebra; linear algebra, polynomials, universal  
algebra] Vysshiaia algebra; lineinaia algebra, mnogochleny,  
obshchaaia algebra. Pod red. P.K.Rashevskogo. Moskva, Fiz-  
matgiz, 1962. 299 p.  
(Algebra) (MIRA 15:9)

LATYSHEV, V.N.

Algebras with identity relations. Dokl. AN SSSR 146 no.5:1003-1006  
0 '62. (MIRA 15:10)

1. Predstavleno akademikom P.S.Aleksandrovym.  
(Lie algebras)

LATYSHEV, V.N.

Lie algebras with identical relations. Sib. mat. zhur. 4 no.4:821-829. Jl-Ag '63.

Zero divisors and nil-elements in a Lie algebra. 830-836  
(MIR 1629)

LATYSHEV, V.N.

Two remarks on PI-algebras. Sib. mat. zhur. 4 no.5:1120-1121 1963.

Selecting the base in a T-ideal. Ibid.:1122-1127 (MIRA 16:12)

LATYSHEV, V.N., starshiy prepodavatel'

Effect of the penetrating power of anions in electrolyte solutions and  
surface-active agents on the metal-cutting process. Izv.vys.ucheb.zav.;  
mashinostr. no.5:173-179 '64. (MIRA 18:1)

I. Ivanovskiy tekstil'nyy institut.

MISHINA, A.P.; PROSKURYAKOV, I.V.; RASHEVSKIY, P.K., red.; LYUSTERNIK, L.A., red.; YANPOL'SKIY, A.R., red.; LATYSHEV, V.N., red.

[Higher algebra; lineur algebra, polynomials, universal algebra] Vysshiaia algebra; lineinaia algebra, mnogochlenny, obshchaaia algebra. Izd. 2., ispr. Moscow, Izd-vo "Nauka," 1965. 300 p.  
(MIRA 18:3)

LATYSHEV, V.N.; KLYUKHINOV, A.F.; CHERNYSHEV, V.V.

Experience in the use of the new type of cutting fluid based on water-soluble oils in the manufacture of textile machinery. Izv. vys. ucheb. zav.; tekhn. prom. no.6:145-147 '65.

(MIRA 19:1)

1. Ivanovskiy tekstil'nyy institut imeni M.V. Frunze i Ivanovskiy khimicheskiy zavod imeni P.S. Baturina. Submitted April 27, 1965.

LATYSHEV, V.N.

Finite generation of a T-ideal containing the element  
[ $x_1, x_2, x_3, x_4$ ]. Sib. mat. zhur. 6 no.6:1432-1434 N-D  
'65. (MIRA 18:12)

V. DIFFUSION OF BORON, CARBON, AND NITROGEN INTO  
TRANSITION METALS OF IV, V, and VI GROUPS OF THE  
PERIODIC SYSTEM. G. V. Demchenko and V. P. Anufrieva  
(Kalinin Moscow Inst. of Non-Ferrous Metals). Doklady

Nauk. Nauk SSSR, 109, 333-5 (1956) July 21.

Studies of B and C diffusion into Ti, Zr, Nb, Ta, Mo, and  
W were made on specimens of pure 99.88% Ti; 99.59% Zr  
(tortoise); and 99.94% Nb; 92.6% Ta (+0.4% Nd); 99.98% Mo;  
and, 99.5% W. Before saturating with boron (especially purified,  
amorphous 99.7% B), and carbon (calcined carbon  
black 99.8% C) the specimens were annealed to relieve the  
internal tensions. X-ray analysis of diffusion showed layer  
formations of TiC, ZrC, Ta<sub>2</sub>C, Nb<sub>2</sub>C, Nb<sub>3</sub>C, W<sub>2</sub>C, Mo<sub>2</sub>C, TiB<sub>2</sub>,  
TaB<sub>2</sub>, NbB<sub>2</sub>, Mo<sub>2</sub>B, and W<sub>2</sub>B. These data were confirmed by  
chemical analysis coordinated with mean content in the

[Redacted] formations of TiC, ZrC, TaC, NbC, NdC, W<sub>x</sub>C, Hf<sub>x</sub>C, etc.

[Redacted] Table. NiB<sub>1-x</sub>Mo<sub>x</sub>B and W<sub>x</sub>B. These data were confirmed by chemical analysis coordinated with mean concentrations in the diffusion layer determined from the concentrations of C and B on the boundaries of the corresponding phases. A table of diffusion equations is given. Activation energies of the B, C, and N diffusion into transition metals of IV, V, and VI groups of the periodic system and the relation of the activation heat to the scattering of metal atoms are discussed.  
(R.V.J.)

DJ

IATYSHEV, V.P.; POPOVA, N.I.

Studying the catalytic oxidation of propylene. Report No.3:  
Methods for determining acrolein in products from the catalytic  
oxidation of propylene over a copper catalyst. Izv. Sib. otd.  
AN SSSR no.9:48-51 '59 (MIRA 13:3)

1. Votochno-Sibirskiy filial Sibirskogo otdeleniya AN SSSR.  
(Acrolein) (Propylene) (Oxidation)

POPOVA, N.I.; STUKOVA, R.N.; LATYSHEV, V.P.

Study of catalytic oxidation of propylene. Report No.6: Inter-  
relation of voluminal and surface factors in the oxidation of  
propylene into acrolein. Izv.Sib.otd.AN SSSR no.8:78-82 '61.

(MIRA 14:8)

1. Vostochno-Sibirskiy filial Sibirskogo otdeleniya AN SSSR,  
Irkutsk.

(Propene) (Acrolein) (Oxidation)

S/020/62/147/006/025/034  
B144/B101

AUTHORS: Popova, N. I., Latyshev, V. P.

TITLE: Study of the mechanism of propylene oxidation on copper catalysts by separate calorimetry

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 147, no. 6, 1962,  
1382-1385

TEXT: The temperature effect on the  $\text{CO}_2$  formation on copper catalysts, was studied because of its decisive influence on the oxidation of hydrocarbons on these catalysts. A triple copper-constantan differential thermocouple was used to measure the difference in temperature of catalyst surface, interior of reaction vessel, and furnace, so as to find out whether heterogeneous oxidation is accompanied by homogeneous oxidation. The copper oxide catalyst had first been deposited on the wall of the reaction vessel from an aqueous copper nitrate solution by heating and passing air through. Before every experiment, the catalyst was stabilized by 1 hr treatment with propylene and  $\text{O}_2$ . Preliminary

Card 1/3

Study of the mechanism of ...

S/020/62/147/006/025/034  
B144/B101

experiments showed that homogeneous oxidation of propylene and acrolein without catalyst did not occur at 300-400°C. When oxidizing propylene on copper oxide, the curve of  $\Delta t_1$  (catalyst surface - interior of reaction vessel) showed that only heterogeneous oxidation occurred at 300-370°C, whereas at 400°C heterogeneous and homogeneous oxidations took place. The course of  $\Delta t_3$  (interior of reaction vessel - furnace) shows homogeneous oxidation to prevail. This is caused by the faster oxidation of acrolein in the interior. Propylene oxidation as such is only heterogeneous, also at the above temperature. At 350-370°C, the oxidation of a mixture of propylene with 2-3% acrolein was of the same nature, but showed slightly lower values since the catalyst was poisoned with decomposition products of acrolein. Over the whole region, the oxidation of acrolein is heterogeneous and homogeneous. The oxidation scheme of propylene on copper catalysts worked out by O.V. Isayev et al (DAN, 129, 141 (1959)) was supplemented by the present experiments. The CO<sub>2</sub> formation was due to (1) direct oxidation of propylene on the catalyst; and (2) oxidation of an organic film forming on the catalyst by decomposition

Card 2/3

Study of the mechanism of ...

s/020/62/147/006/025/034  
B144/B101

of acrolein and propylene; (3) heterogeneous and homogeneous oxidation of acrolein occurring mainly at high temperatures. There are 4 figures.

ASSOCIATION: Institut khimii Sibirskogo otdeleniya Akademii nauk SSSR  
(Institute of Chemistry of the Siberian Department of the  
Academy of Sciences USSR)

PRESENTED: May 19, 1961, by B.A. Kazanskiy, Academician

SUBMITTED: June 12, 1961

Card 3/3

LATYSHEV, V.P.; KALIBERDO, L.M.; POPOVA, N.I.

Differential calorimetry method of studying the oxidation  
of propylene and propylene oxide on a silver catalyst. Kin.  
i kat. 6 no.1:167-171 Ja-F '65. (MIRA 18:6)

1. Institut nefte- i uglekhimicheskogo sinteza, Angarsk.

L 04212-67 EmT(d)/EWP(v)/T/EWP(t)/ETI/EWP(k)/EWP(h)/EWP(l) JD/HM

ACC NR: AR6015874

(A)

SOURCE CODE: UR/0275/65/000/012/V002/V002

AUTHOR: Razuvayev, Yu. P.; Gantsovskaya, A. S.; Latyshev, V. V.

56

B

14

TITLE: A circuit for current-stabilizer control of an electron beam welding assembly

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 12V8

REF SOURCE: Tr. Gor'kovsk. politekhn. in-ta, v. 20, no. 6, 1965, 80-84

TOPIC TAGS: electron beam welding, electron gun, current stabilization, stabilizer

ABSTRACT: The stabilization of the current of an electron beam in welding assemblies may be achieved by an automatic change of the filament voltage of the gun cathode on the primary side of the flipflop of the filament. The executive element of the stabilizer consists of sequential magnetized regulators and a parallelly non-controlled choke. A calculation and a complete circuit of the stabilizer is presented. The control unit is made of semiconductor devices, which makes it possible to obtain signal actuation time by the stabilizer equal to 0.2 sec with an error of 2%. The increment and drop in current during switching in and out is accomplished exponentially in 1-5 sec. The power at the output of the stabilizer amounts to 200 w. [Translation of abstract] 3 illustrations and bibliography of 5 titles. Ye. K.

SUB CODE: 09

Cord 1/1 pla

UDC: 621.38:62(general (obshch.))

PARAMONOV A, V.I.; LATYSHEV, Ye.F.

Use of ion-exchange in the study of the state of a substance in solution. Part 6: Study of complex formation by ruthenium (IV) in solutions of hydrochloric and perchloric acids. Radiokhimia 1 no.4: 458-464 '59.  
(Ruthenium compounds) (Hydrochloric acid) (Perchloric acid)

LATySH&U, X-F.

CIA-RDP86-B0026C, F. L.  
 21 (0), 5 (0) 207-7-2-17/24  
 Author: Mekhetkovskiy, V. N.  
 Title: All-Union Symposium on Radiochemistry (Radiochemistry Symposium po Radiokhimii)

Periodical: Atomnaya energetika, 1959, Vol 7, No 2, pp 173-176 (ISSN)

**ABSTRACT:** A symposium was held in Leningrad from 3 to 5 March 1959. More than 200 participants from different institutes in Moscow, Leningrad, Kiev, Voronezh, Tbilisi and Goriuly attended it. Twenty-eight papers were read. The following are mentioned in the abstracts: On the problem of the molecular state of microamounts of radioactive elements in solutions: I. Ye. Gavrilov, T. I. Arshilova, P. L. Ginzburg, L. I. Il'linichenko, I. A. Sushko, I. D. Shardin. Condition of radioactive elements occurring in microconcentrations of solutions (Zn, Am, Pa, Po). M. N. Tokareva, N. A. Shmeleva. Application of the dialysis method for analysis of radioactive carriers in natural bodies of water. V. I. Parusov. Isotopic labeling. Complex formation of the multivalent chelating ions. V. B. Zubarevko, A. V. Zaritskaya, V. V. Pashkov. Determination of the composition and the availability of organic complexes of the organic acids and compounds with the aid of ethylene diimine tetra acetic acid (EDTA) and uranyl and phosphoric acids. L. N. Chizhikova. A new method for the determination of ion charges of radioactive elements in solution by application of ion exchange resins of different swelling capacities. M. B. Yaroshevskiy. Track catcher analysis. B. M. Filatov: Configuration of the dependence of complex formation between Potassium and KBr by application of ion exchange and the Potentiometric methods. V. N. Lefortov. Salinov's Determination of the conditions of co-precipitation of compounds to be extracted in the organic phase (hydration or urea) nitrate with ester. V. M. Voronko, N. P. Alekseeva. Source of hydronium of nitric acid in dilute sulfuric acid. V. V. Yaroshko. V. V. Yaroshko, A. S. Sosulin, V. V. Zaritskaya. Degree of solvation of the active solid in the dilute solutions of the diethyl ether. V. V. Yaroshko. Determination of the dependency of the distribution coefficient between the organic and the water phases in order to determine the condition of the substance in the solution and to define the concentration range. I. A. Kostyleva. I. A. Kostyleva, F. D. Kostylev. Lectured construction of the hexavalent tungsten with uranite from hydrochloric media. A. N. Semenov on substitution of hydrogen in benzene by the metal atoms p<sup>32</sup>, As<sup>76</sup> and Cd<sup>114</sup>. B. G. Meantzer lectured on the recoil atoms from the reactions of Li<sup>7</sup>(C, e)T, N<sup>14</sup>(n, p)C<sup>14</sup> in a medium of cyclic hydrocarbons. D. I. Lebedeva lectured on the influence of the WO<sub>3</sub> and H<sub>2</sub>O on the reduction velocity of hexavalent Plutonium under the influence of its own oxidation. In the course of thorough discussion it was established that the comprehension of the condition of radioactive elements in solution are of evident importance for the whole range of radiochemistry. More studies have to be made in this field as were made before. A better coordination of all the institutes which are occupied with this problem will yield good results in the future.

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LATYSHEV, Yegor Zakharovich, slesar'; CHMIL', L.N., red.;  
SHEVCHENKO, M.G., tekhn. red.

[He has carried out his obligation twelve times over]  
Est' dvenadtsat' godovykh norm. Khar'kov, Khar'kovskoe  
knizhnoe izd-vo, 1962. 23 p. (MIRA 16:7)

1. Khar'kovskiy elektromekhanicheskiy zavod (for Latyshev).  
(Kharkov--Electric coils)